



Democratic Efficacy and the Varieties of Populism in Europe

Working Paper

Populist Communication, Cognitive Processing Styles and Emotions

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Abstract

Various empirical studies have recently demonstrated a link between negative emotions and populist attitudes. Further research implies that emotional signals are differently processed by people with a populist mindset. This experimental study tackles the main research question whether different cognitive processing styles, especially the need for closure (NFC), impact the effect of emotional appeals in supporting populist ideas. We assume that negative emotions are more impactful in case people have a cognitive processing style in which they use heuristics rather than in-depth processing. We argue that high NFC scores increase people's agreement with populist arguments, especially when these are framed in an emotional way, and in case arguments appeal to populist ideas. We conducted a number of multivariate repeated measures ANOVA and tested various hypotheses, such as whether populist statements framed as emotional will result in more agreement than those in neutral terms, and whether NFC increases the agreement with populist statements in emotional frames. Our results support our main hypotheses in so far that participants generally agree more with emotionally framed arguments, especially those of a populist nature. Moreover, personality traits and negative emotions also have an effect on this relation. People scoring high in need for closure (NFC), which translates to a desire for control and certainty as well as using heuristics rather than in-depth processing, and those scoring high in anxiety tend to agree more with populist arguments, while this is not the case for non-populist arguments.

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Introduction

In our recent research (Abadi, Bertlich, Duyvendak, Fischer, 2022), we found that reported emotions about political events are an important predictor for populist attitudes (Castanho Silva et al. 2018; Castanho Silva, Jungkunz, Helbling and Littvay, 2019). In contrast to previous research (Rico, Guinjoan, & Anduiza, 2017; 2020), we found empirical evidence that negative emotions play an important role in explaining populist attitudes. In addition to anxiety, anger and contempt also appeared to be important (see Nguyen, Salmela, & Scheve, 2022). These emotions are likely to reflect people's negative feelings about their current socio-economic or socio-cultural status and the governmental policies to deal with these societal challenges. Individuals who experience specific emotions are likely to interpret new societal events in line with their personal emotions, that is, in terms of threat, unfairness, frustration or derogation. For example, anxious people who are uncertain about their own socio-economic position, feel little control, tend to seek new information that in turn justifies their anxiety, and interpret future events in a similar way as unpredictable and uncontrollable (Lerner et al., 2015).

The association between negative emotions and populist attitudes has meanwhile been supported by various studies (e.g., Abadi, Arnaldo, & Fischer, 2021; Rhodes-Purdy, Navarre, & Utych, 2021; Schumacher, Rooduijn, & Bakker, 2022), but there are various ways in which emotions can affect populist attitudes or voting. Previous studies have shown for example that populist messages elicit stronger discrete emotions, such as hope, pride, anger or fear, than non-populist messages, and are therefore found to be more persuasive (Wirz et al., 2018). These results also suggest that emotional signals are differently processed by people who support populist arguments and vice versa. Here, we focus on the question whether different cognitive processing styles, especially the need for closure (NFC; Roets &

Van Hiel, 2011; Kruglanski, 2004), impact the effect of emotional appeals in accepting populist ideas.

Emotions

To date, various studies have explored the role of emotions in the development of populist attitudes, extremism or negative attitudes towards out-groups, for example, by studying emotion-eliciting appeals instead of rational arguments (Wirz et al., 2018) or by showing that emotions not only lead to greater support, but also maintain support for populist parties (e.g., Abadi et al. 2022; Nguyen et al., 2022).

Our recent research (Abadi et al. 2022) confirmed previous theorizing and research that populist views are better predicted by (negative) emotions (e.g., Aslanidis, 2020; Nguyen et al., 2022; Salmela & von Scheve, 2017; Wirz et al., 2018) than by objective socio-economic factors (Rooduijn & Burgoon, 2018) or socio-cultural explanations, such as social identity (see e.g., Brown, 2000; Hogg, 2001, 2008). The prominent role of negative emotions explaining support for populist attitudes may be reinforced by the emotional framing of populist messages (i.e., emotional appeals). Indeed, populist parties and populist leaders have been found to use significantly more negative emotional appeals (anger, fear, disgust, sadness) than mainstream politicians. In case political actors aim to attack political opponents, the elites, the media, or other out-groups (e.g., refugees and immigrants), they appeal to anger and disgust (Widmann, 2021). Due to very different value systems, both negative emotions pivot on moral judgements and are easily triggered by perceived social norm violations (Lazarus, 1991; Petersen, 2010), in turn reinforcing a justification to punish rule violators.

Political campaigns of right-wing populist parties have been found to generate anti-immigrant attitudes through emphasizing economic and symbolic threats (Lucassen & Lubbers, 2012; Schneider, 2008; Sniderman & Hagendoorn, 2007; Matthes & Schmuck,

2017). Symbolic threat appeals refer to threats to a social group's system of meaning, such as their religious customs, values, while economic threat appeals portray immigrants as competitors for jobs, housing, or social welfare benefits (Atwell Seate & Mastro, 2016; Schmuck & Matthes, 2015; Matthes & Schmuck, 2017). Across multiple studies, it has been shown that symbolic threat was positively and realistic threat negatively correlated with conservatism (Kachanoff, Bigman, Kapsaskis, & Gray, 2021).

According to schema theory, once one element of a cognitive cluster is primed, the extended network of interlinked associations can be activated (e.g., Brewer & Nakamura, 1984). For example, populist messages that attribute blame to working-class immigrants being responsible for increasing crime, economic woes and housing shortage, may prime negative stereotypes towards immigrants (e.g., "they exploit our generous social welfare system"; "they threaten our urban safety"; "the government gifts them with our valuable housing projects"). These views can become manifest after repeated exposure to populist communication (e.g., during election campaigns and political decisions) through spreading-activation of cognitive networks (Higgins, 1996).

Repeated exposure to populist communication leads to prevalent stereotypes to be used as heuristic cues (i.e., mental shortcuts) for forming populist attitudes. Political perceptions, such as populist views, are cognitively affected by trait activation or schema theory and primed by communications that include populist arguments (Hameleers, Reinemann, Schmuck, & Fawzi, 2019).

Based on the premise that a 'model' is a heuristic devise to structure how people explore their environment, Woods (2017) implies that populism is an inductive model, which has emerged as a type of "reasoning by analogy". Furthermore, the author argues that populism as a concept may have arisen from inductive conceptualizing of analogous historical events required to be characterized and identified.

Affect heuristic was termed by Slovic (1999) to describe human conclusions made when emotions are involved, and in which existing likes and preferences (e. g. political orientation) influence our beliefs and attitudes. Moreover, once people dislike something, then they regard its risks as higher and its benefits as marginal (Finucane et al., 2000). This might explain emotionally charged topics, such as national security, economic stability, crime and immigration, being vulnerable to affect heuristic. Research on affect heuristics has shown that positive and negative mood states enable different cognitive processing styles. A positive mood leads to global, heuristic-driven, and top-down processing, while negative mood induces local, systematic, detail-oriented, and bottom-up processing (Schwarz & Clore, 2007; Storbeck & Clore, 2005). Accurate cue information supports the success of heuristics. Moreover, informed deliberate ignorance is a cognitive tool that enables people to curate their knowledge base (Kozyreva, Lewandowsky, & Hertwig, 2020).

Need for Closure

Affect and emotion also have important situational influences on the expression of personality traits, such as closed-mindedness, tolerance, prejudice, as well as social and political cognition more generally (e.g., Marcus, Sullivan, Theiss-Morse, & Stevens, 2005; Ray & Zald, 2012; Storbeck & Clore, 2007). Moreover, emotions have varied effects on cognitive processing. In particular, negative emotions like fear and anxiety may have a negative impact on individual ability to engage in cognitive elaboration and open-minded thinking. Fear, anxiety, and the associated threat response, in particular, enables people to deal effectively with threats via narrowed attention (Bar-Haim, Lamy, Pergamin, Bakermans-Kranenburg, & van, 2007; Bishop, Duncan, Brett, & Lawrence, 2004), while decreasing executive function, such as working memory capacity (Lavric, Rippon, & Gray, 2003), which is associated with close-mindedness and becoming more dogmatic.

Here, we focus on need for closure (NFC) as one of the personality traits that may strengthen the effects of emotions on the endorsement of populist attitudes. NFC describes the motivation to achieve finality in decisions and judgments, often prematurely. People scoring high in NFC have a low tolerance for ambiguity and uncertainty and may be attracted to dogmatic political or religious views (Kruglanski, 2004). Previous research using eastern and western European samples has found a link between NFC, conservative ideology and conservative beliefs (Kossowska & Van Hiel, 2003). NFC has been found to have a major influence on the formation of conservative beliefs and racism, while these effects are mediated by right-wing authoritarianism (Van Hiel, Pandelaere, & Duriez, 2004). Moreover, high levels of NFC contribute to so-called group-centrism, which describes a behavioral pattern opinion uniformity, encouragement of autocratic leadership, in-group favoritism, resistance to change and conservatism (Kruglanski, Pierro, Mannetti, & De Grada, 2006). In the context of voting behavior, scientific evidence indicates a linear trend between NFC and voting for conservative parties (Chirumbolo, & Leone, 2008). Recent research considering cultural contexts and different brands of populism in the US and Italy found fundamental similarities between these two countries in the positive correlation between NFC and populism (Kruglanski, Molinario, & Sensales, 2021). We argue that the element of polarization in populism draws on the nationalist sense of belonging, which is part of the 'Us versus Them' reasoning (i.e., social categorization). Moreover, it is characterized by the desire for certainty (i.e., NFC) to protect the in-group (*Us*) from perceived infiltrators (*Them*).

The Current Study

Our main research question is whether different cognitive processing styles influence the effect of emotional framing in accepting populist ideas. We assume that negative emotions are more impactful in case people have a cognitive processing style in which they use heuristics rather than in-depth processing. The tendency to use a heuristics processing style

will be operationalized by the concept of *need for closure* (NFC; Roets & Van Hiel, 2011), which describes a preference for quick, decisive answers.

We argue that high NFC scores increase people's agreement with populist arguments, especially when these are framed in an emotional way, and in case arguments appeal to populist ideas (e.g., against the EU and liberal immigration policies; denying climate change). People scoring high in NFC would be more influenced by emotional framing, especially when it appeals to populist arguments (e.g., against the EU and liberal immigration policies; denying climate change). In order to determine whether emotional (versus neutral) arguments would be especially effective in populist reasoning, we had participants read fictional statements that contain arguments that reflect populist (against the EU and liberal immigration policies; denying climate change) or non-populist views (in favor of the EU and liberal immigration policies; in favor of measures for climate change). We frame the arguments in emotional or more neutral words. We assume that emotions are elicited by emotional statements, including emotion words, (Izard, 2009; Kennedy-Moore & Watson, 1999; Lieberman et al., 2007) and that such texts would influence the extent to which people will be convinced by arguments (Lerner et al., 2015; Lindquist, MacCormack & Shablack, 2015; Rocklage, Rucker, & Nordgren, 2018; Scherer, 2005; Schrauf & Sanchez, 2004). This would especially be the case with populist arguments, as they aim more at everyday experiences of people. In this study, we aim to test the following hypotheses:

H1. Populist statements that are framed as emotional will result in more agreement than populist statements framed in neutral terms. No differences of emotional frame are expected for non-populist views (i.e., interaction effect of emotional appeals frame and populist arguments).

H2. *Populist Attitudes* increase the agreement with populist (in comparison with non-populist) statements, in both emotional and neutral frames.

H3. *Need for Closure* (NFC) increases the agreement with populist statements, but only in emotional frames. We do not expect an effect for neutral messages, nor for non-populist arguments.

H4. *Anxiety* increases the agreement with populist statements in emotional frames. We do not expect an effect for neutral messages, nor an increase for non-populist arguments.

Methods and Design

Sampling Procedure and Data Collection

Our study was pre-registered on AsPredicted.¹ Based on the calculation of our power analysis, to be on the very safe side and to allow to test moderators, we decided to collect data from 500 participants in the UK, while quotas based on current UN-census data (*United Nations Data Retrieval System*) were set up for age, gender and geographical region. In the informed consent respondents were instructed about the purpose of our study, their voluntary participation and guaranteed privacy based on GDPR regulations. We obtained ethical approval from the Faculty Ethics Review Board of the University of Amsterdam.

Survey

The survey began with general information about our study and a request for informed consent, which all respondents were required to comply, before proceeding to the actual questions. The survey included both existing and newly developed scales. Cronbach's Alpha (α) is the most common measure of internal consistency ("reliability") of survey items and it is used here to determine how reliable our multiple Likert-scale questions are.

Dependent variables (DVs)

We constructed the measure *Agreement* for each statement (a fictional Facebook post), based on the answers to three questions: "To what extent do you agree with this

¹ An anonymized version of our pre-registration created to use during peer-review can be found here: https://aspredicted.org/blind.php?x=LNL_26J

statement?"; "How convincing do you find the statements in this text?", and "Would you be willing to take action (e.g., signing a petition, joining a protest group, demonstrating) on this topic?"). We used aggregated scores of the statements across the three topics, but separately for emotional frames (i.e., emotional appeals), neutral frames, populist and non-populist arguments. We used one control variable to check the emotional framing of the statements: *Perceived emotionality* ("To what extent do you think this person has strong emotions about this topic?").

Predictors

Populist Attitudes. In studies in which populist attitudes have been measured, populism is considered a multidimensional concept and at least three dimensions have been distinguished (e.g., Akkerman, Mudde, and Zaslove, 2014; Castanho Silva et al., 2018; 2019); Schulz, Wirth, & Müller, 2018): people-centrism, anti-elitism, and Manichaeian outlook. This scale was recently revised and comprises of nine items (Castanho Silva, Jungkunz, Helbling and Littvay, 2019). *People-centrism* refers to the will of the people as the highest principle, implying that people should have a more prominent role in political decisions (e.g., "Politicians should always listen closely to the problems of the people"). *Anti-elitism* is the idea that there is an elite which is different from the ordinary people, forming the political establishment (e.g., "The government is pretty much run by a few big interests looking out for themselves"). Sometimes, other groups are also included as elites, such as academics, experts or interest-groups (Akkerman et al., 2014). Finally, the anti-pluralist dimension is operationalized as the division of groups into good and evil, also referred to as the *Manichaeian outlook*, implying that the ordinary people are morally superior to the elites (e.g., "You can tell if a person is good or bad if you know their political views").

In addition, we also created the supplementary subscale *nativism* inspired by previous research (Young 2016; Young, Ziemer, & Jackson, 2019) including three items (e.g., "The

political elites have failed to protect our cultural identity"), which focuses on the idea that people being native to a country believe to have more rights to be treated fairly, and to receive priority treatments when living in the country of birth (see also Hochschild, 2018). The 12 items (using a 7-point Likert-scale from *strongly disagree* to *strongly agree*) formed a reliable scale (Cronbach's $\alpha = .66$).

Need for Closure. This scale is based on the abridged version of the *Need for Closure* scale (NFC; Roets & Van Hiel, 2011). Originally, it was developed as a theoretical framework for the cognitive–motivational aspects of decision making (see Kruglanski & Webster, 1996; Webster & Kruglanski, 1994). People scoring high in NFC prefer order and structure in their lives, despising chaos and disorder. They also favor predictability, desiring secure and stable knowledge (e.g., "I dislike it when a person's statement could mean many different things"), which is reliable across circumstances. High NFC individuals also sense an urgent desire to reach quick decisions, reflected in their need for decisiveness (e.g., "I become quickly impatient and irritated if I cannot find a solution to a problem immediately"). Furthermore, they feel unease during ambiguous situations, experiencing discomfort once devoid of closure. Finally, it is reflected in their closed-mindedness and reluctance their knowledge being challenged by alternative opinions or inconsistent evidence (e.g., "I feel irritated when one person disagrees with what everyone else in a group believes"). The 13 items formed a very reliable scale (Cronbach's $\alpha = .88$).

Anxiety. The core appraisal characteristic of anxiety is the perception of threat (Roseman, 1984; Smith & Lazarus, 1993). In this research, we used a scale based on items measuring symbolic and realistic threats (Kachanoff et al., 2021) in the context of the COVID-19 pandemic ("How much of a threat, if any, is the Coronavirus outbreak for..."). Realistic threats include physical or financial safety ("Your personal health", "Your personal financial safety" and "The UK economy") and symbolic threats refer to one's sociocultural

identity ("British values and traditions"). These different threat perceptions (i.e. realistic and symbolic) tap how anxious people are. Symbolic threat also predicted deploying creative ways to affirm one's social identity and values. The 10 items formed a very reliable scale (Cronbach's $\alpha = .87$).

Subjective Social Status. We used the *MacArthur Scale of Subjective Social Status* (Adler, Epel, Castellazzo, & Ickovics, 2000), which depicts an ascending ladder between zero and ten, measuring the socio-economic status as subjectively perceived by respondents.

Education and Employment. *Education* level was measured from low (up to high school degree), middle (technical/vocational degree) to high levels (university degree). For *Employment* status, participants could check the following categories: unemployed, retired, student and (self)employed.

Demographics. Our survey also included background questions regarding gender, age, religion, ethnicity and marital status. Additional variables were measured but not used in the current analyses: *Need for Chaos* (Arceneaux, Gravelle, Asmundsen, Petersen, Reifler, & Scotto, 2021; Petersen, Osmundsen, & Arceneaux, 2020), *Collective Narcissism* (Golec de Zavala, Cichocka, Eidelson, & Jayawickreme, 2009), *Social Identity* (Ellemers, Spears and Doosje, 2002), *Conspiracy Mentality* (CMQ; Bruder, Haffke, Neave, Nouripanah & Imhoff, 2013), *Emotional Partisan Attachment* (Bankert, Huddy & Rosema, 2017); *Political Efficacy* (European Social Survey ESS, International Social Survey Programme, Eurobarometer); *Political Values* and *Democratic Efficacy*.

Pilot Studies

We constructed an online survey, in which we manipulated two between-subjects (BS) factors: an emotional frame (emotional or neutral) and the nature of the statement (populist or non-populist). Participants read fictive Facebook statements that were either Emotional or Neutral and Populist or non-populist. In order to check whether the emotional statements

were indeed perceived as more emotional than the neutral statements, we ran a pilot study. In the first UK pilot study (N=60), the manipulation check failed, as there was no main effect of frame on perceived emotionality. We therefore launched a second UK pilot study with the revised order of scales (by moving the vignettes towards the beginning of the *Survey Flow* on the *Qualtrics XM* online survey platform), in order to determine any differences between the manipulation checks. We analyzed the results for the manipulation check of our second UK pilot study again with a two-way MANOVA, but the manipulation checks still failed.

Main Study

Finally, we decided to change the design into a within-subjects (WS) design and to present participants different types of shorter Facebook statements that we constructed as either emotional or neutral, and as either populist or non-populist. All participants received the same 24 (short) statements, two for each category (e.g., emotional and populist) and about three different topics (8 statements x 3 topics). We had one DVs, namely *agreement* and one manipulation check, namely *perceived emotionality*.

We have two within-subjects (WS) factors: *Frame* (emotional versus neutral) and *Argument* (populist versus non-populist) as illustrated below (Table 1). Using a 7-point Likert-scale from *not at all* to *very extremely*, participants are asked two questions after each (fictional) Facebook statement ("To what extent do you agree with this statement?" and "To what extent do you think this person has strong emotions about this topic?"). All participants received 24 statements that are both populist and non-populist and emotional or neutral, 2 different statements in each of the following categories.

Table 1.

Experimental Conditions

		Topic		
		EU	Climate Change	Immigration
Frame	Emotional (negative)	ANTI-POPULIST (In favor) *	ANTI-POPULIST (In favor) *	ANTI-POPULIST (In favor) *
		POPULIST (against) **	POPULIST (against) **	POPULIST (against) **
	Neutral (no emotions)	ANTI-POPULIST (In favor) *	ANTI-POPULIST (In favor) *	ANTI-POPULIST (In favor) *
		POPULIST (against) **	POPULIST (against) **	POPULIST (against) **

in favor* reflects anti-populist views; *against* reflects populist views

The statements were kept short in order to capture attention of respondents and were about three different topics, the EU, climate change and immigration. Moreover, we constructed both populist and non-populist statements. The emotional framing was added by using exclamation marks and emotional words.

Procedure

Our survey was uploaded on the *Qualtrics XM* online survey platform (Version: July 2021) and the data were collected after being synchronized with a global research platform (*Cint*), which provided us a heterogeneous pool of survey respondents involved in our project.² In total, our survey resulted in 641 respondents, while 96 respondents with missing values were excluded, resulting in 545 complete respondents.

² A *pre-test* with 50 respondents was run to evaluate the survey time taken (on average between 11 and 15 min). It also aimed to assess the clarity of survey items and its suitability to respondents. Our pre-test results were satisfactory and no further survey revisions were required.

Results

Descriptive Statistics

Respondents

Our survey sample included quotas based on current UN-census data set up for age, gender and geographical region. The demographic characteristics of the UK sample are summarized in Table 2.

Table 2

Sample Characteristics in the UK (N=545)

Sample Characteristics	Categories	UK
Age (%)	Under 18	0
	18 - 24	11.38
	25 - 34	21.84
	35 - 44	22.02
	45 - 54	23.49
	55 - 64	19.27
	65 - 74	2.02
	75 - 84	0
	85 or older	0
Gender (%)	Male	48.26
	Female	51.74
	Other	0
Employment (%)	Employed	60.18
	Self-employed	8.81
	Unemployed	15.41
	Student	4.40
	Retired	5.87
	Inapplicable	5.32
Education (%)	No degree	4.77
	High school	21.65
	High school, no degree	13.03
	Technical degree	18.72
	Bachelor's degree	28.62
	Master's degree	8.44
	Doctoral degree	4.77
Socio-Economic Ladder 1-10 (%)	1	2.75
	2	4.58
	3	8.99
	4	8.62
	5	24.22
	6	18.17
	7	19.27
	8	10.28

9	1.65
10	1.47

Relations between Variables. Table 3 presents the means, standard deviations, and inter-correlations of the variables in this study. Overall, there is a strong correlation between emotional measures (*Anxiety, Threats*) and *Populist Attitudes*. Moreover, there is a strong correlation between *Need for Closure*, emotional measures (*Anxiety, Threats*) and *Populist Attitudes*.

Table 3

*Means, Standard Deviations, and Inter-Correlations of Variables (*p < .05, **p < .01, ***p < .001)*

	Mean	SD	Threats (Symbolic and Realistic)	Anxiety	Need for Closure
Threats (Symbolic and Realistic)	4.58	1.15	-		
Anxiety	4.34	1.30	0.644***	-	
Need for Closure	4.81	0.85	0.349***	0.426***	-
Populist Attitudes	4.81	0.68	0.412***	0.512***	0.555***

Manipulation Checks. We first tested whether the emotional statements are perceived as more emotional than the neutral statements (*Frame*) both for the populist and non-populist statements (*Argument*). A repeated measures ANOVA with Frame (emotional versus neutral) and Argument (populist versus non-populist statements) showed a significant main effect for Frame, $F(1, 544) = 72.496, p = .000, \eta_p^2 = .118$, as well as a main effect of Argument, $F(1, 544) = 4.158, p = .042, \eta_p^2 = .008$. No interaction effect was found. Emotional populist statements were perceived as more emotional than neutral populist statements (see Figure 1); populist statements were also seen as more emotional than non-populist statements. We can therefore conclude that the manipulation of emotionality was successful.

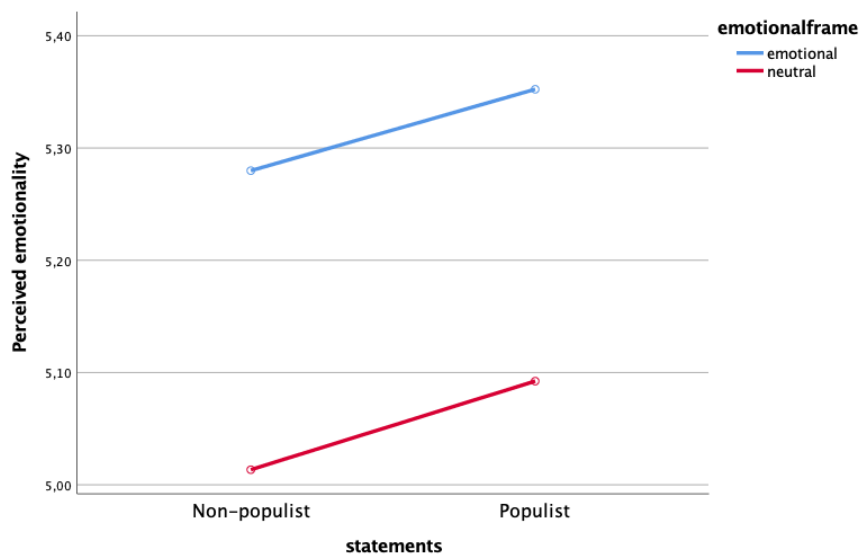


Figure 1. Effects of Frame on Perceived Emotionality, split for populist and non-populist arguments.

We then tested whether agreement with populist statements was higher for people who also have stronger populist attitudes. Indeed, we found that populist attitudes were stronger correlated with the agreement with populist statement ($r = .434, p < .0001$) than with anti-populist statements ($r = .117, p = .006$).

Main Hypotheses Testing

Need for Closure. Next, we conducted a median split for NFC and create a categorical variable, (with low (score < 4.80), versus high (score > 4.81)). We then conducted a multivariate repeated measures ANOVA with Frame and Argument as repeated measures, and high and low NFC as factor. We tested the interactions between NFC, Frame and Argument. The results showed a main effect of Frame, $F(1, 532) = 341.520, p = .000, \eta_p^2 = .391$, and Argument, $F(1, 532) = 61.627, p = .000, \eta_p^2 = .104$, and an interaction effect between NFC and Argument, $F(1, 532) = 6.493, p = .011, \eta_p^2 = .012$. As expected, high NFC participants agreed more with populist statements than Low NFC participants, whereas this

difference was not significant for non-populist statements (see Figure 2). There were no further significant two-way or three-way interactions.

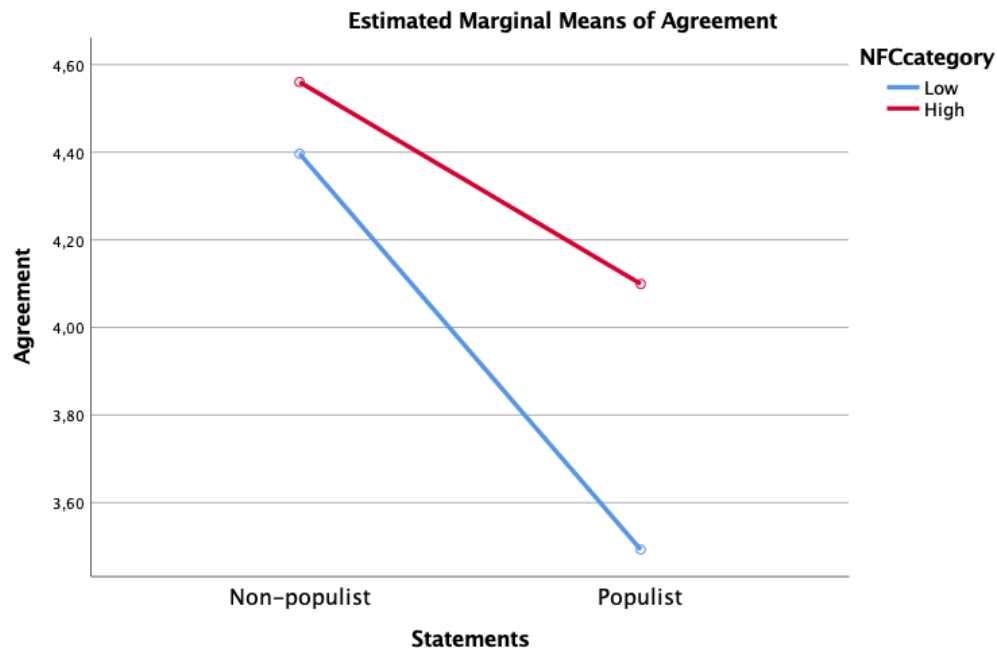


Figure 2. Effects of NFC on Agreement with populist and non-populist arguments.

Anxiety. Next, we conducted a median split for Anxiety and create a categorical variable, (with low (score <5.70), versus high (score >5.71)). We then conducted a multivariate repeated measures ANOVA with Frame and Argument as repeated measures, and high and low Anxiety as factor. The results showed a two-way interaction effect between Anxiety and Argument, $F(1, 444)= 14.901, p=.000, \eta^2_p=.032$, showing that anxious people agreed more with populist statements, than non-anxious people (see Figure 3).

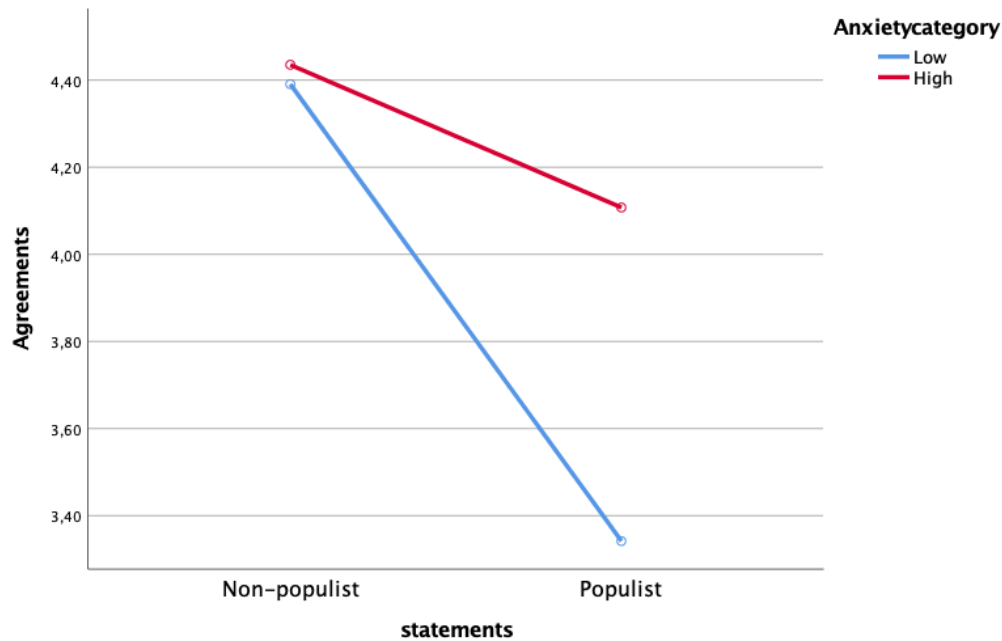


Figure 3. Effects of Anxiety on Agreement with populist and non-populist arguments.

In addition, we found a marginal significant three-way interaction effect, $F(1, 444) = 3.284$, $p = .071$, $\eta_p^2 = .007$.

Populist Attitudes. Finally, we conducted a median split for Populist Attitudes and created a categorical variable, (with low (score <4.80) versus high (score >4.81). We then conducted a multivariate repeated measures ANOVA with Frame and Argument as repeated measures, and high and low Populist Attitudes as factor. We only found a two-way interaction effect between Populist Attitudes and the Argument, $F(1, 543) = 22.557$, $p = .000$, $\eta_p^2 = .040$, showing that participants with strong populist attitudes agreed more with populist statements than participants with low populist attitudes, whereas this difference was not found for non-populist statements (see Figure 4).

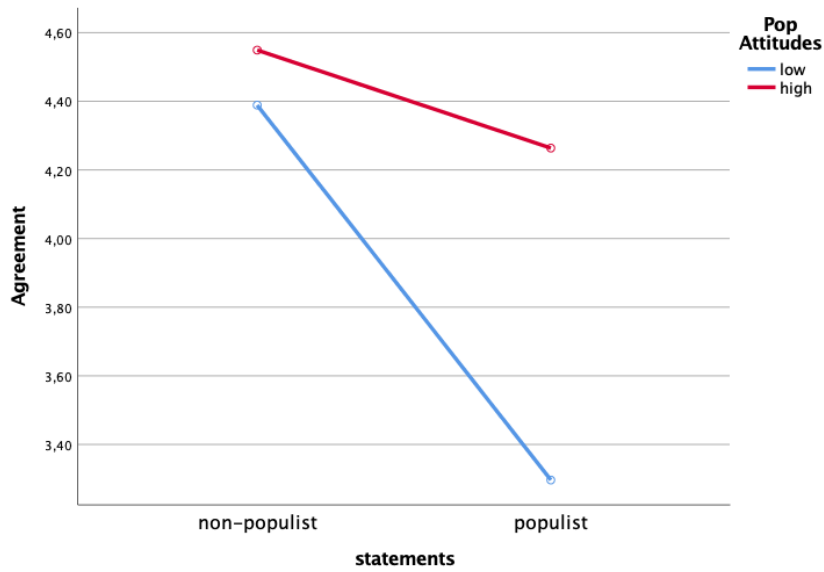


Figure 4. Effects of Populist Attitudes on Agreement with populist and non-populist arguments.

Discussion

Our results support our main hypotheses in so far that participants generally agree more with emotionally framed arguments, especially in case the arguments are of a populist nature. In addition, personality traits and emotions also play a role in this relation. People scoring high in need for closure (NFC), which translates to a desire for control and certainty as well as using heuristics rather than in-depth processing, tend to agree more with populist arguments, whereas this is not the case for non-populist arguments. Moreover, people who report higher anxiety also agree more with populist arguments, whereas this is not the case for non-populist arguments. Finally, participants who already have populist attitudes are more likely to agree with populist arguments.

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